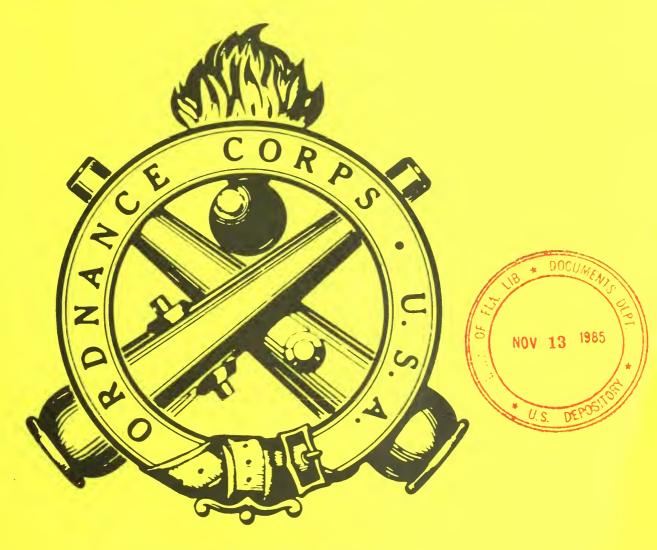
OFFICE CHIEF OF ORDNANCE

## SELECTED BIOGRAPHIES

FROM THE

### **ORDNANCE HALL OF FAME**



1 NOVEMBER 1985





## DEPARTMENT OF THE ARMY OFFICE OF THE CHIEF OF ORDNANCE ABERDEEN PROVING GROUND, MARYLAND 21005

November 1, 1985

In a continuing effort to review Ordnance Corps history and provide professional development guidance to our Ordnance officers, I have prepared a special pamphlet on selected members of the Ordnance Hall of Fame.

This pamphlet outlines the careers of 10 of the 112 members in the Ordnance Hall of Fame. In order to choose these 10 outstanding Ordnance officers, I used selection criteria which consisted of the following: Ordnance Corps Major General or above, variety of commissioning sources, relatively current active duty dates, and a spectrum of jobs and career paths.

Any comments or recommended changes to this pamphlet can be addressed to my Office Chief of Ordnance (ATSL-O-P), Aberdeen Proving Ground, Maryland 21005-5201.

I hope this pamphlet will be of assistance to you in fulfilling your mentorship duties.

Sincerely,

WILLIAM E. POTTS

Major General, U. S. Army

Chief of Ordnance

#### THE ORDNANCE HALL OF FAME

The Ordnance Hall of Fame was established on May 9, 1969. Its members are honored with a permanent display located in the Ordnance Musuem at Aberdeen Proving Ground, Maryland.

Since its inception, the Hall of Fame has grown not only in membership, but also in its value to the Ordnance Corps. In addition to giving perpetual recognition to those personnel who have made significant contributions to the ordnance mission of the U. S. Army, it preserves a substantial amount of historical information about the Ordnance Corps and its distinguished contributors. Promotion of greater awareness of the Ordnance Corps, its traditions, missions, and achievements is the essence of the purpose of the Ordnance Hall of Fame.

Looking briefly at the accomplishments of only a few distinguished inductees, one can see the vast contributions they have made to the Ordnance Corps, from the development of small arms to the evaluation of rocket propulsion. Hall of Fame members include Mr. J. M. Browning, who invented, perfected, and supervised the production of numerous military small arms. Mr. Browning's work is largely responsible for the superiority in small arms weaponry enjoyed by the United States today. "The Father of the Machine Gun," Mr. R. J. Gatling, is another member. Dr. Werhner Von Braun, whose work in the technical advancements of rocketry led to the liquid fueled rocket engine and ultimately to manned space flight, is also commemorated.

Nominations for the Hall of Fame are open to all retired or deceased personnel, military as well as civilian, who have made significant contributions to the ordnance mission of the U. S. Army. Nominations may be submitted by anyone at any time; however, to be considered by the current year's selection board, they must be received by October 1 of the preceding year. The board is composed of eight individuals - five primary and three, alternate members. They are nominated by the Commanding General, U. S. Army Ordnance Center and School. Board members will be individuals who have served in positions of major responsibility involving ordnance functions and are normally Active duty general officers. However, retired general officers, senior ordnance officers and noncommissioned officers, and civilians may be included.

The selection board meets each April to select the current year's inductees. Normally, the board selects five or six individuals for induction. Each person selected, or his next of kin, is notified and invited to attend the induction ceremony which is held in conjunction with the Ordnance Corps' birthday celebration in May. A certificate of induction into the Hall of Fame, as well as a Hall of Fame medallion, is presented to the inductee. A permanent display, containing a photograph and a narrative of the individual's contributions, is then placed in the Ordnance Museum. As of 1 November 1985, there are 112 permanent displays.

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### GENERAL HENRY A. MILEY



Inducted in 1975

General Miley, during a military career spanning over 34 years, served in Ordnance and Ordnance-related positions of exceptional responsibility. General Miley had the distinction of being the first Ordnance officer to attain the rank of general. While assigned as Assistant Deputy Chief of Staff for Logistics (Programs and Budgets) during the Vietnam buildup, he was directly responsible for the successful establishment of a logistical base in Vietnam. In November 1970, General Miley was selected as Commanding General, U. S. Army Materiel Command (AMC). His 5-year service as Commander of AMC was characterized by the drawdown in Vietnam and steadily declining resources. Through his innovative managerial techniques and leadership, he established a responsive logistical base for the Army. The major research and development efforts conducted by AMC during his tenure have covered the spectrum of weapon systems such as the tube launched, optical tracked, wire guided missile system (TOW), advanced attack helicopter, and SAM-D missile system. As a result of his foresight and professional acumen, today's Army has an exceptionally efficient logistical base ready to meet the current demands and sufficiently flexible to meet the challenges of tomorrow.

#### **GENERAL HENRY A. MILEY**

General Miley has served in nearly all levels of leadership positions within the Ordnance field. He was detailed to the Ordnance Corps in 1945 and continued to serve in Ordnance related positions during the next 30 years. Expertise in Ordnance was developed by assignments to battalion, depot, arsenal, and Department of the Army positions. Throughout these assignments, General Miley analyzed and solved innumerable problems involving supply and distribution of Ordnance items to the troops in the field. Following World War II, General Miley served on the faculty of the Ordnance School and provided many young officers with his perspective on wartime Ordnance problems and manageable solutions.

In 1966, while serving in the Office, Deputy Chief of Staff for Logistics, Department of the Army, the action in South East Asia increased drastically in tempo. The logistical support for this action was nearly beyond our capabilities at that time. The planning and putting into effect a method of supporting this effort fell upon the Deputy Chief of Staff for Logistics; General Miley proved to be a keystone in finding the solutions to the numerous problems encountered during this buildup period. Due to General Miley's performance of duty within the Office of the Deputy Chief of Staff for Logistics, he was selected as the Deputy Commanding General of the U. S. Army Materiel Command in June of 1969.

In his new capacity, General Miley began to apply the expertise he had gained throughout his career. With the axiom, "How can we improve our support to the soldier in the field?", he gained the confidence and respect of those he worked with and those he supported. This action and his display of vast professional knowledge within the logistical field provided the impetus for General Miley's promotion to full General.

In November of 1970, General Miley was selected as the Commanding General of the U. S. Army Materiel Command. From this position, he was able to improve the efficiency and image of the total Army Materiel Command. With the draw down and ending of the U. S. military involvment in South East Asia, the resultant reducing actions within the logistical and procurement fields were compounded. This required great flexibility and intensive management in order to protect the readiness of our forces and ensure cost effective management. These goals were accomplished through teamwork and the leadership provided by General Miley. In this time frame, the development of replacements for many of the Army's fighting vehicles was underway. This in itself has proven to be a task requiring tremendous insight and extremely competent leadership. These vehicles are nearing production and General Miley's foresight will be with the U. S. Army far into the next century.

General Miley has achieved the position and rank no other Ordnance officer has yet equaled. He has also provided the military and industry with many articles, papers, and spoken words. It will be through these that the leaders of the future can gain knowledge and direction for the decisions they must make.

General Miley managed a highly complex military organization welded together from the former technical services and made it a viable, forward-looking outfit. General Miley is a leader of men, a manager of all resources, and a planner for tomorrow.



### LIEUTENANT GENERAL EUGENE J. D'AMBROSIO



Inducted in 1981

LTG Eugene J. D'Ambrosio began his career as an enlisted man in 1942 and achieved the rank of Lieutenant General. He served as the Ordnance Corps senior officer and as the Deputy Commanding General of the U. S. Army Materiel Development and Readiness Command (DARCOM) from 1976-79. As a young Ordnance officer, he designed the first Army standardized stock accounting system, which was ultimately adopted by all of the technical services. As the Department of the Army Project Manager for the first operations research effort to review and revise rebuilding practices for Army materiel, he developed the economics life philosophy used today concerning inventory and Research and Development type items. As the G-4 of the 1st Infantry Division in 1965, he prepared the Division for movement to Vietnam and for conduct of combat logistical operations there. As the first US division to enter Vietnam, the "Big Red One" set precedents for all follow-on divisions. Brigadier General in 1971, he restructured the Army Depot Maintenance system by combining the maintenance depots in CONUS, Europe, and the Far East into a single structure under the command and direction of the U. S. Army Materiel Command. While serving as the Director of Supply and Maintenance in the office of the DCS Logistics in 1974, he implemented the first Army-wide Integrated Logistics System (ILS) for the support of new weapons systems. LTG D'Ambrosio was the first DCG of DARCOM, serving from 1976-79. He made four significant contributions in this position. First, the establishment of the Depot Systems Command to command and control the Army's supply and maintenance depots worldwide. Second, the establishment of the Army Materiel Readiness Agency at Lexington, KY. Third, the designing and implementation of the first readiness reporting system for the US Army wholesale logistics command. And fourth, the direct control of all the Materiel Readiness Commands of DARCOM, with an inventory of over \$37 billion.

#### LIEUTENANT GENERAL EUGENE J. D'AMBROSIO

General D'Ambrosio was born in Yonkers, New York, on 13 April 1921.

He enlisted in the Army during World War II and served at Headquarters, Antilles Department, Puerto Rico, from April 1942 until August 1944. In October 1944 he was commissioned a Second Lieutenant of Infantry at Fort Benning, Georgia. He was subsequently assigned as a platoon leader, Infantry Replacement Training Center, Camp Blanding, Florida.

In March 1946 General D'Ambrosio reverted to Reserve status. He returned to active duty in March 1951 as a First Lieutenant, Ordnance Corps, and Property Officer, Fort McArthur, California. The following November he was ordered to the Far East Command and spent three years as an Ordnance supply officer in Japan and Korea.

He returned to the United States in 1954, and was assigned to Raritan Arsenal, New Jersey, as Assistant to the Chief, Ordnance Supply Demand Analysis Agency. He remained in that position until June 1958, except for a six-month period when he attended the Ordnance Officer Advanced Course at Aberdeen Proving Ground.

General D'Ambrosio was next assigned to the Office of the Deputy Chief of Staff for Logistics at the Department of the Army. He served as a staff officer in the Materiel Maintenance Division until July 1961, when he left to attend the Command and General Staff College, Fort Leavenworth, Kansas. Upon graduation, he became Logistical Advisor, U. S. Army Element, Army Section, MAAG, Pakistan.

After two years in Pakistan, he returned to Fort Riley, Kansas, and was designated the 701st Maintenance Battalion Commander, 1st Infantry Division. General D'Ambrosio later became the 1st Infantry Division Assistant Chief of Staff, G-4, Logistics, and transferred with the unit to Viet Nam where he remained until July 1966.

He was then assigned to the J-4 directorate of Headquarters, U. S. Army Element, European Command, where he served as a logistics war planner. After a year in this position, he returned to attend the Army War College, Carlisle Barracks, Pennsylvania. Upon graduation in June 1968, he was assigned to the Pentagon as Chief, Equipment Maintenance and Readiness Division, in the Office of the Assistant Secretary of the Army (Installations and Logistics).

General D'Ambrosio served as Commander, Red River Depot, Texarkana, Texas, for one year before being named Director of Maintenance, Headquarters, U. S. Army Materiel Command in July 1971.

He was assigned as the Director of Supply and Maintenance in the Office of the Deputy Chief of Staff for Logistics at Department of the Army on 31 October 1973, and remained in that position until 8 September 1975 when he was assigned as Special Assistant to the Commanding General, U. S. Army Materiel Command, Alexandria, Virginia.

On 1 January 1976, General D'Ambrosio was named Deputy Commanding General for Materiel Readiness, Headquarters, U. S. Army Materiel Command and promoted to the rank of Lieutenant General.



# JEAN E. ENGLER



Inducted in 1981

Lieutenant General Jean E. Engler made numerous significant contributions to the Ordnance Corps. During World War II, he directed the design, development, and testing of the military general purpose tire, and as project manager was responsible for the development and production of synthetic rubber tires. After World War II as a Lieutenant Colonel in Tokyo as the Chief, Maintenance and Supply Division, he planned and organized the collection and rebuild of all materiel from the Pacific Theatre. While assigned to the Chief of Industrial Office Branch, Office, Chief of Ordnance, General Engler planned the Tank and Automotive Production Program for supporting the Korean War effort. In 1952, General Engler was appointed Chief of the Industrial Division, Ordnance Tank and Automotive Command. In this position, he originated the "Controlled Accelerated Cycle" i.e., the development-to-production cycle for complex major end items. Additionally, he established the optimum balance between stocks on hand and production capability through his mobilization planning concept. As Deputy Commanding General, US Army, Vietnam, he established four major ports and base complexes which resulted in a fully responsive logistics system that met the need of the combat and support soldiers. As the Deputy Chief of Staff for Logistics from 1967-69, he implemented five significant policy actions. First, he established a user-oriented supply system with direct contact to units in the Second, he modernized the logistics Automatic Data Processing system on a worldwide basis. Third, he standardized ammunition supply management. Fourth, General Engler established the depot maintenance closed loop support system. Fifth, he revised the supply stockage policy to reduce levels and pipeline while improving effectiveness. General Engler's military career was one of a continuous effort to provide the best material to combat and support forces at the lowest cost.

### LIEUTENANT GENERAL JEAN E. ENGLER

General Jean E. Engler was born on 3 August 1909 in Baltimore, Maryland. After graduation from De LaSalle High School in New York City in 1926, he enlisted in the Army, serving from March 1928 through June 1929.

He received an appointment to the U. S. Military Academy in 1929, was graduated in June 1933 with the degree of Bachelor of Science in Military Science, and was commissioned a second lieutenant of Infantry.

General Engler's first assignment was Randolph Field, San Antonio, Texas. From 1934 through 1937, he was assigned to the 20th Infantry Regiment, Fort Warren, Wyoming, and the 33rd Infantry Regiment, Canal Zone, Republic of Panama. From 1937 through 1938, he was assigned to the Canal Zone, Republic of Panama.

In 1938, General Engler transferred to the Quartermaster Corps, and was assigned to the Holabird Ordnance Base in Maryland, where he served as Executive Officer and Assistant Chief of the Engineering Division. From August 1943 until March 1944, he served as Commanding Officer of the Desert Test Command at El Centro, California.

He was then assigned as Automotive Research Engineer in the Technical Division at Aberdeen Proving Ground, Maryland. For approximately one year, during 1944 and 1945, General Engler was in the Special Equipment Division in the Office of the Chief of Ordnance, Detroit, Michigan. In July 1945, he was transferred to General Headquarters in the Pacific as Chief of the Equipment Division.

Early in 1947, General Engler transferred to the Ordnance Corps. Later in 1947, he became Deputy Ordnance Officer in Japan, returning to the Office of the Chief of Ordnance, Washington, D. C., in June 1948 as Chief of the Automotive Branch of the Industrial Division. In December 1952, he was assigned as Chief of the National Production Control Division of the Ordnance Tank-Automotive Command, which was later redesignated as the Industrial Division. In January 1956, General Engler was assigned to the Industrial Division, Office of the Chief of Ordnance, as the Chief. After serving in this capacity until July 1957, he was assigned to the Office of the Deputy Chief of Staff for Logistics as Chief of the Procurement Division and later as Director of Procurement.

In June 1959, he was assigned to Headquarters, U. S. Continental Army Command, Fort Monroe, Virginia, as the Deputy Chief of Staff for Logistics. From May 1961 until September 1963, he was assigned to the U. S. Army, Pacific, as the Commanding General, U. S. Army, Japan. In September 1963, he was assigned to Headquarters, U. S. Army Materiel Command, Washington, D. C., as the Deputy Commanding General.

Following his assignment at the U. S. Army Materiel Command, General Engler became the Commanding General of the U. S. Army Supply and Maintenance Command until December 1965 when he was appointed Deputy Commanding General, U. S. Army, Viet Nam. In this capacity, he established the logistic base of four major ports and base complexes.

In 1967, General Engler was assigned as the Deputy Chief of Staff for Logistics at Department of the Army.



LIEUTENANT GENERAL HAROLD F. HARDIN, JR.



Inducted in 1983

Lieutenant General Harold F. Hardin made, over a 31 year career, an indelible mark on the United States Army by representing the Ordnance Corps to the Army-in-the-Field. While serving in such responsible positions as Battalion Commander, Commanding General, Tank-Automotive Readiness Command, and Deputy Commander of the U. S. Army Materiel Development and Readiness Command, LTG Hardin has become known as the champion of Materiel Readiness. As Battalion commander of the 801st Maintenance Battalion, 101st Airborne Division, his highly successful maintenance program materially aided the Division in preparation for Combat in the Republic of Vietnam. As Commanding General, TARCOM and Deputy Command General, DARCOM, LTG Hardin's continued liaison with the Army-in-the-Field assured the success of innumerable Army Programs which range from the fielding of new equipment to staffing for Organizational Maintenance. Throughout his distinguished career he has been identified as an Ordnance Officer willing to spend the effort to get to the root of a problem; as a Battalion Commander unafraid to push a component problem back to the designer and as a Lieutenant General equally willing to spend hours in motor pools worldwide to ensure this critical link was functioning adequately. Lieutenant General Hardin, through countless visits to the Army-in-the-Field, has ensured that the efforts of the wholesale community and the United States Army remained coordinated in maintaining the Army equal to the task of defending the Nation. Because of his outstanding contributions to the Army, Lieutenant General Hardin is known as "Mr. Ordnance".

### LIEUTENANT GENERAL HAROLD F. HARDIN, JR.

General Harold F. Hardin, Jr., was born in Kansas City, Missouri, on 14 October 1927. He graduated from high school in Atchison, Kansas, in 1945, and was commissioned a second lieutenant of Infantry in 1952. He holds a Bachelor of Science degree in History from Loyola University of Los Angeles, and a Master of Business Administration degree in Industrial Management from Babson Institute.

General Hardin entered active military service as an enlisted man in October 1945 and was assigned to Fort Lee, Virginia, and later to Fort Campbell, Kentucky. He was separated from the military service in November 1946. After separation from the service, he entered Loyola University in 1947 and graduated in June 1951. In December 1951, General Hardin was appointed to the Officers' Reserve Corps in the grade of Second Lieutenant, Infantry.

Upon his call to active duty 17 March 1952, he was assigned to the 1st Infantry Regiment, 6th Infantry Division, Fort Ord, California, as a platoon leader. This was followed in August 1952 by assignment to Fort Benning, Georgia, as a student in the Associate Infantry Company Officers' Course.

In January 1953, he departed for Korea and served with the 7th Infantry Division through April 1954. During this time, he served as platoon leader and, later, Company Commander of I Company, 31st Infantry Regiment. Upon his return to the U.S. in 1954, he served as a instructor at the Infantry School.

In 1955, General Hardin was commissioned as a Regular Army Officer in the Ordnance Corps. The same year, he attended the Basic Officers' Course at Aberdeen Proving Ground, Maryland. In April 1956, he was assigned to Killeen Base, Texas, as a Special Weapons Officer.

In October 1957, General Hardin was assigned to the 9th Ordnance Battalion (later redesignated the 101st BN) in Germany. During a three year tour, he commanded both the Depot and Direct Support Companies of the Battalion.

After completing the Officer Advanced Course at the Ordnance School in June 1961, he attended Babson Institute as a graduate student. In December 1962, he was assigned to the XVIII Airborne Corps, Fort Bragg, North Carolina, as the Corps Maintenance Officer. In June 1964, he was stationed at I Corps (VN), South Viet Nam, serving as Deputy Senior Advisor, I Corps Area Logistics Command, and also as the G-4 Advisor, I Corps (VN).

Upon his return to the U. S. in 1965, General Hardin attended the Command and Staff Course, Naval War College, Newport, Rhode Island, graduating in June 1966. Next, he commanded the 801st Maintenance Battalion, 101st Airborne Division at Fort Campbell, Kentucky, until June 1967. This was followed by his assignment as a student at the U. S. Army War College, graduating in 1968.

He was next assigned to the Logistics Directorate, J-4, Organization of the Joint Chiefs of Staff, as a Staff Officer. In July 1970, he was assigned as the Commander, Division Support Command, in the 2d Infantry Division in Korea. In May 1971, General Hardin was assigned to the Directorate of Ammunition, Office of the Deputy Chief of Staff for Logistics, Department of the Army, as

Chief, Planning and Distribution Division. In March 1972, he assumed command of the Safeguard Logistics Command, Huntsville, Alabama.

General Hardin was assigned to Headquarters, U. S. Army Materiel Command, Alexandria, Virginia, on 1 April 1973 as Deputy Director of Requirements and Procurement. In July 1973, General Hardin was assigned to the U. S. Army Armament Command, Rock Island, Illinois, as the Director of Procurement and Production. In September 1975, General Hardin was assigned to Headquarters, U. S. Army Materiel Command, Alexandria, Virginia, as Director of Requirements and Procurement. On 28 February 1977, General Hardin assumed command of the U. S. Army Tank-Automotive Materiel Readiness Command, Warren, Michigan. On 4 June 1979, General Hardin became the Deputy Commanding General for Materiel Readiness, U. S. Army Materiel Development and Readiness Command, Alexandria, Virginia.



LIEUTENANT GENERAL
JOSEPH M. HEISER, JR.



Inducted in 1973

LTG Heiser was born 22 January 1914 in Charleston, South Carolina, and retired with over 30 years active duty in the U. S. Army. Throughout his career, his motto remained, "A well supported combat soldier is the backbone of an effective Army and it is the logistician's job to provide that support." LTG Joseph Heiser came up through the ranks, from a first sergeant to second lieutenant in 1943. LTG Heiser's outstanding organizational ability and resourcefulness were illustrated early in his career as a first lieutenant and carried through his career until retirement. LTG Heiser's name has become synonymous with two of the most successful programs in Ordnance: the closed-loop system and the logistics offensive. The closed-loop system maximized the utilization of materiel by effecting the overhaul of unserviceable materiel and return to the supply system, thus substantially reducing acquisition requirements. The logistics offensive resulted in marked reduction in tonnages of supplies, greatly improved inventory and location accuracy, materially reduced response time required to meet unit requirements, significantly improved operational readiness rates, and the upgrading of combat readiness througout the entire U. S. Army. LTG Heiser's career was characterized by professionalism of the highest order. His inspired leadership, competence, and devotion to duty resulted in a profound and lasting effect on the U. S. Army's logistical effectiveness.

### LIEUTENANT GENERAL JOSEPH M. HEISER, JR.

Throughout his career, General Heiser was guided by the priciple that well supported combat soldiers are the backbone of an effective Army, and that it is the logistician's job to provide that support. This was illustrated early in his career when, as a First Lieutenant in the European Theater of Operations, he was awarded the Legion of Merit for his job as the Assistant Ammunition Officer for Southern Base Operations.

In January 1951, General Heiser was the Division Ordnance Officer of the 7th Infantry Division in Korea. Following the Chosin Reservoir engagement and the subsequent evacuation from Hungnam to Pusan, General Heiser's first duty was to plan and direct the efforts in the enormous task of completely reequipping two infantry battalions, one artillery battalion, and several smaller units. As a result of his actions, he was awarded the Legion of Merit, First Oak Leaf Cluster.

General Heiser was selected to attend the University of Chicago as a participant in the successful Industrial/University of Chicago Graduate Program leading to the award of a Masters of Business Administration. Selected officers attended the two year program on a full time basis, dividing their time among the school and different private industries.

The training proved invaluable when, as Commander of the Communication Zone, Europe, in 1965, he supervised the development of the initial plans to relocate all U. S. Forces from France when General DeGualle limited his country's association with NATO. This resulted in his appointment as a Chevalier in the the Legion of Honor in 1966.

When he was first assigned to the Department of the Army, Office of the Deputy Chief of Staff for Logistics, the logistics buildup in Southeast Asia was underway. As the Assistant Deputy Chief of Staff for Logistics (Materiel Readiness), General Heiser developed the closed loop system. The system was designed to provide a serviceable end item when and where it was needed.

The task of supporting the logistics buildup in Viet Nam changed to the responsibility for moving supplies and material to the combat forces when he bacame Commander of the 1st Logistical Command in Viet Nam in 1968. The Logistics Offensive was born in Phu Bai, Viet Nam, at the suggestion of General Creighton W. Abrams, then Commander, U. S. Military Assistance Command, Viet Nam. It resulted in marked reductions in tonnages of supply, greatly improved inventory and location accuracy, materially reduced response time, significantly improved operational readiness rates, and upgraded combat service support to combat troops to a level never before achieved during wartime.

When he assumed the duties of the Department of the Army's Deputy Chief of Staff for Logistics, General Heiser implemented the Logistics Offensive worldwide. As part of the Logistics Offensive, General Heiser directed the development of the Army Logistics System Master Plan.

General Heiser's career was characterized by professionalism of the highest order. Through his inspired leadership, professional competence, and devotion to duty, he imbued all with a sense of urgency and a "can do"

attitude, which had a profound effect on the Army's logistics system. Many of the logisticians of today's Army have profited and will continue to profit from the traits General Heiser displayed throughout his 30 years of military service.



FRED KORNET, JR.



Inducted in 1982

LTG Fred Kornet, Jr. served the Ordnance Corps as a dedicated logistician througout his career, culminating it as the Army's senior logistician. He commanded Watervliet Arsenal during a period of expanding US military commitments to South Vietnam. His leadership in meeting the challenge of rapidly growing demands for the arsenal's products sparked a great increase in the arsenal's production only ten months after he assumed command. As commander of the US Army Aviation Systems Command, LTG Kornet applied his extensive knowledge of computer systems to successfully implement the Army Materiel Command's ALPHA program there. ALPHA increased logistical efficiency by standardizing basic computer systems, equipment, and programs among various logistics agencies. LTG Kornet served as the Deputy Chief of Staff for Logistics from 1973 to 1975. During his tenure as the Army's senior logistician, his leadership led to the success of a number of programs which were designed to achieve simplicity and responsiveness in the Army's logistics system. He implemented the final phase of a comprehensive Logistics Offensive Program, which meshed the program with the Army's Logistics System Master Plan by means of automated management systems. Within months, this phase overcame many of the immediate obstacles to efficient logistics support. Many other improvements in Army logistics were spawned through programs promoted by LTG Kornet. Among these improvements were simplification of paperwork at the user level, increased responsiveness to the user at the support level, development of a standard direct exchange system, refinement of selected item management techniques, expansion of the direct support system, and advancement of logistics research.

### LIEUTENANT GENERAL FRED KORNET, JR.

General Kornet reported to active duty in February of 1941. He saw continuous service in the U.S. and later the European Theater during World War II. He reverted to inactive status in February 1946.

General Kornet returned to active duty in 1950 with assignments of progressive responsibility in the Armor branch and, then, in the Ordnance Corps. In October 1959, he was the Executive Officer in the Industrial Division in the Office of the Chief of Ordnance. From August 1961 to June 1962, General Kornet was a student at the Army War College. In July 1962, he became the Deputy Assistant Chief of Staff for Logistics of the 7th Logistical Command in Korea.

In 1963, General Kornet was selected to be a member of the Institute of Advanced Studies. He participated in research efforts involved with several studies of long range interest to the U. S. Army. He produced a comprehensive analysis of the study program to determine man-years of effort related to each effort. He also did individual research on Command and Control of Tactical Nuclear Weapons.

In August 1967, he was selected as the commander of Watervliet Arsenal. He had responsibility for the research and development, engineering, procurement, production, and logistical support of all U. S. Army cannon assemblies and mortars during the build-up of U. S. involvement in Viet Nam.

General Kornet was appointed the Director of Ammunition in the Office of the Deputy Chief of Staff for Logistics at the Department of the Army in September 1967. After serving in this capacity for two years, he was appointed the Assistant Deputy Chief of Staff for Logistics (Programs and Budget) at Department of the Army. He had responsibility for programming and budgeting of Procurement of Missiles and Aircraft, Army (PEMA) items of materiel.

He then assumed command of the U. S. Army Aviation Systems Command. He served in this capacity from July 1971 to December 1972. General Kornet was responsible for acquisition and support of all Army aircraft. He directed the activities in research and development, engineering, quality assurance, and logistical support of aircraft. He also oversaw the depot rebuild facility engaged in overhaul and rebuild of crash-damaged and high time aircraft. While he commanded the Aviation Systems Command, he directed the implementation of a management system to automate requisitioning, procurement, cataloging, and financial control procedures for all U. S. Army aircraft materiel.

In January 1973, General Kornet was selected as the Deputy Chief of Staff for Logistics at the Department of the Army. His primary responsibility was the management of worldwide logistics functions of distribution, maintenance, and equipment readiness. He directed the development and installation of standard, automated management systems in the functional fields of supply, maintenance, transportation, ammunition stockage, weapons inventory, and port clearance. He also supervised the U. S. Army's foreign military sales program, guiding it through a tumultuous period as the annual program increased from less than one billion to four billion dollars.

General Kornet's Army career was predominantly hardware oriented. His early assignments were primarily in the fields of procurement and production of Ordnance materiel. His more recent experiences were in the management of logistics organizations. The success of the programs which he was involved in was due largely to General Kornet's dynamic leadership.



# MAJOR GENERAL ERWIN M. GRAHAM, JR.



Inducted in 1979

Major General Erwin M. Graham, Jr's, career covered the spectrum of Ordnance service: field service, industry, research and development, and procurement. His contributions in each of these areas have left an indelible mark of success. Under his leadership, the Army achieved outstanding success in providing all types of munitions, including bombs, rockets, and explosives, for all U. S. Forces in the Southeast Asia area in a timely manner at a very critical time. In addition, as a result of his direct involvement, the Army initiated, and is now successfully executing, the most extensive ammunition production base modernization program since the start of World War II. General Graham was responsible for the development of a new ammunition support doctrine for use in the field army and established a worldwide ammunition reporting system which provides better visibility of ammunition stock status. He was also responsible for the development and evaluation of logistics concepts, doctrine, organizations, systems, material concepts and requirements, and logistical planning factors for the army in the field. General Graham designed a new approach to the methods and structure of combat service support for U. S. Army combat elements in the field. He was instrumental in having the U. S. Army institute an aerial support link between U. S. depots and overseas elements to enhance the supply of repair parts for field commanders. This procedure is operational at this time, with significant improvements to the entire logistics system and to the materiel readiness posture of the Army. Major General Graham's long and distinguished Ordnance service and his many achievements and contributions to the U. S. Army and to the Nation mark him as an outstanding leader.

### MAJOR GENERAL ERWIN M. GRAHAM, JR.

General Graham was associated with the Ordnance Corps as an educator, trainer, materiel developer, and logistics systems developer since he entered active Army service in 1941. From that year into 1942, he served as Deputy Director, Automotive Training at Aberdeen Proving Ground, Maryland.

During 1942-1943, he was Director of Automotive Training in the Ordnance Unit Training Center at Flora, Mississippi. He moved overseas in January 1944 to Algeria, where he served as Ordnance Officer of the Joint Rearmament Committee, which organized, equipped, and trained the French Army in North Africa. Later that year, he moved to France as a staff officer in the G-4 of the Southern Line of Communications Headquarters at Dijon, France.

Early in 1945, he moved to the Supreme Headquarters, Allied Expeditionary Force Mission to France in Paris, where he was Chief of the U. S. Equipment Group, Rearmament Division.

In 1947, he was once again in the U.S., serving as Chief of the Instrument Laboratory at Aberdeen Proving Ground, Maryland. He was there until June 1948, when he went to the Massachusetts Institute of Technology for graduate studies.

After completing his academic work, he returned to Aberdeen in 1950 where he served as a staff officer at the Ordnance School. He became Chief of the Guided Missile Division of the Ordnance Training Command at Aberdeen in 1951 and moved to Redstone Arsenal in 1952 to establish what is now the U. S. Army Ordnance Missile and Munitions Center and School. He was then assigned to the Ordnance Officer Advanced Course at Aberdeen.

From 1953 through 1956, he was in Europe, serving first as Commanding Officer of the Ordnance Procurement Center in Oslo, Norway, then as Commanding Officer of the Ordnance Procurement Center in Paris, France. During 1956-1957, he attended the Command and General Staff College at Fort Leavenworth, Kansas.

He returned to Redstone Arsenal in 1957 to become Chief of the Control Office of the Army Ordnance Missile Command. In the spring of 1961, he was a student at the Armed Forces Staff College, Norfolk, Virginia.

He went to Korea in August 1961 where he commanded the 74th Ordnance Battalion until April 1962. From there he was moved to Taegu, Korea, and became Assistant Chief of Staff for Logistics of the 7th Logistical Command.

On his return to the U.S. in 1962, he became Chief of the Missile Branch in the Research and Development Directorate of the U.S. Army Materiel Command, Washington, D.C., until the summer of 1964 when he was assigned to the Naval War College at Newport, Rhode Island.

After completion of his studies there, he was assigned as Commandant of the U. S. Army Missile and Munitions Center and School, Redstone Arsenal, Alabama in July 1965.

He returned to Aberdeen Proving Ground in August 1967 and commanded the U. S. Army Ordnance Center and School until June 1968.

In June 1968, he assumed command of the U. S. Army Ammunition Procurement and Supply Agency in Joliet, Illinois.

From February 1970 to March 1973, he was Commanding General of the U.S. Army Munitions Command, Picatinny Arsenal, New Jersey.

In March 1973, he assumed command of the newly activated U. S. Army Logistics Center, Fort Lee Virginia.



# MAJOR GENERAL FRANK A. HINRICHS



Inducted in 1984

Major General Hinrichs entered the Ordnance Corps in 1941 and served through 1975. In 1949 he was assigned as planner and organizer for the massive tactical vehicle rebuild program in Japan. This program subsequently gave great support to United Nations Forces during the Korean War. In the early 1960's, when it became apparent the U.S. Forces would be involved in South East Asia, Major General Hinrichs initiated the reactivation, renovation, and modernization program of the government-owned ammunition plants which would be needed. As part of this program, MG Hinrichs pioneered the Army's "Should "Should Cost" was designed to assist procurement personnel in Cost" program. negotiating contracts with sole source contractors. Under this system, a team of Army representatives would visit the contractor's plant and evaluate production factors. As a result, the Army then determined how much the production for a specific contract "should cost". For his efforts on the "Should Cost" program, MG Hinrichs was awarded the Presidential Award for Management Improvement. In November 1972, MG Hinrichs became the Commanding General of the Aviation Systems Command (AVSCOM). In this capacity, MG Hinrichs guided the early development phase of the Blackhawk, and the Heavy-Lift Helicopter. MG Hinrichs also supervised the pilot installation and prove-out phase of the Alpha System. The Alpha System is the integrated, automated management system designed to handle all the principle functions required to manage a large commodity command.

#### MAJOR GENERAL FRANK A. HINRICHS

General Frank Anton Hinrichs was born in Stillwater, Oklahoma, 22 July 1918, and was graduated from Stillwater High School in 1936. He attended the Oklahoma Agricultural and Mechanical College (Oklahoma State University), Stillwater, Oklahoma, graduating in January 1941 with a Bachelor's Degree in General Engineering. While at Oklahoma A & M College, he participated in the Reserve Officers' Training Corps program and was commissioned as a Second Lieutenant in the Corps of Engineers on 16 May 1940.

Following graduation, he was employed by Westinghouse Electric until called to active duty in July 1941. At that time, he was detailed for duty with the Ordnance Department and assigned to Raritan Arsenal, Netuchen, New Jersey, with successive assingments as Ammunition Officer, Officer-in-Charge of the Railway Maintenance Car Assembly Shops, Fire Control Maintenance Shops, and Small Arms Maintenance Shops.

In May 1945, as a Captain, he was assigned to the Ordnance Section, Theater Service Forces, U. S. Forces, European Theater, as a Fire Control Maintenance Officer. In February 1946, he returned to the U. S. and reverted to an inactive status. In November 1948, he returned to active duty and was assigned to Springfield Ordnance District, Springfield, Massachusetts, as the Industrial Mobilization Planning Officer.

In October 1949, he was assigned to U. S. Army Forces, Far East, with successive assignments as Automotive Maintenance and Requirements Officer in Headquarters, Eighth Army, and Japan Logistical Command. He returned to the U. S. in January 1953.

Following a tour in the Boston Ordnance District from 1953 to 1955 as a Procurement and Production Control Officer, General Hinrichs was assigned to the Industrial Division, Office of the Chief of Ordnance. During this later assignment, he was Chief of the Facilities and Resources Section.

During 1958 to 1959, General Hinrichs attended the Command and General Staff College, Fort Leavenworth, Kansas. Following this training, he was assigned to the 51st Ordnance Group, Seventh Army, Europe, as the Maintenance Officer. In August 1960, he assumed command of the 19th Ordnance Battalion providing wholesale supply support to the Seventh Army.

In October 1962, he was reassigned to the Office of Assistant Secretary of the Army (Installations and Logistics). He remained in this assignment as the Ammunition, Weapons, and Engineer Materiel Contract Action Officer until 1965, when he was selected for attendance at the Industrial College of the Armed Forces. Concurrent with this course, he attended George Washington University, Washington, D. C., and received his Master's Degree in Business Administration.

In September 1966, General Hinrichs assumed command of the 29th General Support Group, Viet Nam. He commanded the Group until April 1967, providing direct logistical support to all U.S. and Allied Forces in the III Corps area. The Group participated in several operations, including Shenandoah and Junction City, and for its efforts received a Meritorious Unit Citation.

In April 1967, he was reassigned in Viet Nam to command the U. S. Army Procurement Agency, providing over \$240 million per year in contractual support to the U. S. and Allied Forces in Viet Nam. General Hinrichs was concurrently the Director of Procurement, 1st Logistical Command.

Following his Viet Nam assignment, he was assigned in September 1967 to the Officer Personnel Directorate, Office of Personnel Operations, Department of the Army, as Chief of the Ordnance Branch and, later, as the Executive Officer, Officer Personnel Directorate.

In October 1969, he reported for duty at Headquarters, U. S. Army Materiel Command. He was first assigned as the Director of Procurement and Production, then, as Deputy for Procurement, Directorate of Requirements and Procurement. In August 1970, he became the Director of Requirements and Procurement.

In November 1972, General Hinrichs became the Commanding General of the Aviation Systems Command.



MAJOR GENERAL
HOMER D. SMITH, JR.



Inducted in 1984

As Chief of Staff of the 1st Logistics Command in Vietnam in 1968, General Smith was almost entirely responsible for the organization's administration. During this period, this organization was the largest organization in the United States Army, with an assignd strength of over 100,000 troops who provided logistical support to Army, Navy, Air Force, and Marines engaged in combat in the Da Nang area. In 1974, Major General Smith was assigned as Defense Attache, U. S. Embassy, Vietnam. The escalating advances of the enemy required General Smith's expertise to plan and execute the important operation "Frequent Wind". This operation was designed to evacuate the U. S. Embassy employees. General Smith departed the embassy only hours prior to the evacuation of the Marine Guards and the demolition of the communication equipment. As Commanding General, U. S. Army Logistics Center, he increased the credibility and visibility of the Logistics Center by increasing the number of visits and contacts made by its staff. Because of his experience and expertise, General Smith was chosen as the first Director of Logistics, NATO International Staff, Brussels, Belgium, following his retirement in 1979.

## MAJOR GENERAL HOMER D. SMITH, JR.

General Homer D. Smith, Jr. was born in Breckenridge, Texas, on 16 February 1922. He graduated from the Reserve Officers' Training Corps program at Texas A & M University in January 1943, entered Officer Candidate School at Aberdeen Proving Ground, Maryland, in February 1943, and was commissioned a Second Lieutenant of Ordnance in May 1943.

In October 1943, he joined the Headquarters of the Southern Base Section in England and served as Ordnance Supply Officer until April 1945, when he became a liaison officer with the Advanced Section of the Communications Zone in Germany. In June of that year, he was reassigned to the Headquarters of the Theater Service Forces in Paris, France, where he served until separated from the Army in August 1946.

Returning to active duty in July 1948 to enter the competitive tour program for a Regular Army commission, he was stationed again at Aberdeen Proving Ground, Maryland. After having received his Regular Army commission, he was detailed to the Field Artillery and, in January 1950, entered the Basic Artillery Officers' Course at Forts Bliss and Sill. In August of that year, he was reassigned to Germany and took command of C Battery, 70th Field Artillery Battalion. After completing his detail to Field Artillery in January 1952, he commanded the 701st Ordnance Maintenance Company of the 1st Infantry Division until November of that year when, after having been promoted to Major the previous September, he became the Division Maintenance Officer. In September 1953, he was again assigned to Aberdeen Proving Ground to become Executive Officer of the newly formed Human Engineering Laboratory.

In January 1956, he reported to Purdue University as Assistant Professor of Military Science and remained there until August 1959. At that time, he returned to Aberdeen Proving Ground to attend the Ordnance Officer Advanced Course. In January 1960, he reported to the 707th Ordnance Maintenance Battalion of the 7th Infantry Division in Korea as Executive Officer. General Smith took command of that unit in January 1961 after having been promoted to the grade of Lieutenant Colonel.

He attended the 1961-1962 regular course at the Command and General Staff College at Fort Leavenworth, Kansas, and then reported to Headquarters, Department of the Army where, during the period July 1962 through July 1966, he served successively in the Office of Personnel Operations, the Office of the Deputy Chief of Staff for Logistics, and as Assistant Secretary of the General Staff. He was promoted to the grade of Colonel in August 1966 and entered the Industrial College of the Armed Forces as a student.

In June 1967, he assumed command of the 8th Logistics Command in Italy and served in that position until December 1968 when he moved to the 1st Logistical Command in Viet Nam to become, in succession, Comptroller and Chief of Staff. General Smith assumed command of the U. S. Army Support Command, Da Nang, in the Republic of Viet Nam in October 1969. In September 1970, he assumed the duties of the Deputy to the Assistant Deputy Chief of Staff for Logistics (Supply and Maintenance) in the Pentagon.

In August 1971, he became Director of Plans, Office of the Deputy Chief of

Staff for Logistics, and on 1 July 1972, returned to the Supply and Maintenance Directorate as Director.

On 31 October 1973, General Smith was designated Deputy Commanding General for Logistics Support for the U. S. Army Materiel Command. He served in that capacity until his assignment as Defense Attache, U. S. Embassy, Siagon, Viet Nam, in September 1974.

General Smith's assignment as Defense Attache was prematurely terminated as a result of the fall of South Viet Nam in late April 1975. After a short tour in Hawaii to reconcile the affairs of the Defense Attache's Office, General Smith reported to the Headquarters of the U. S. Army Training and Doctrine Command at Fort Monroe, Virginia, as Deputy Chief of Staff for Logistics. He continued in that assignment until July 1977 when he assumed command of the U. S. Army Logistics Center at Fort Lee, Virginia.



## MAJOR GENERAL J. FREDERICK THORLIN



Inducted in 1983

Major General J. Frederick Thorlin's total contribution to the Ordnance Corps over a 32 year career is immeasurable. His first great challenge as an Ordnance officer came during World War II. Two major stumbling blocks for planning the ammunition logistics in the Pacific were the lack of 10,000 ton transport ships and the incredible leadtime of 11 months required for shipment of the ammunition up to 8,000 miles by freight ship. Accuracy in planning was imperative for each planned offensive campaign in order to assure no shortage of ammunition. To provide ammunition supplies for each campaign, ammunition was distributed on the basis of maximum utilization. Through General Thorlin's outstanding planning and managing, each offensive was provided with sufficient ammunition in a timely manner. From 1957 through 1959, as President of the Ordnance Board at Aberdeen Proving Ground, General Thorlin organized his officers into commodity-oriented specialty groups in order to reduce duplication of effort and to insure that even small items within each commodity received the proper attention. Later, while General Thorlin was Commander of White Sands Missile Range (WSMR), he inaugurated the "off-range" firing of long-range missiles. Through a massive effort and constant coordination with the Governors of Utah, Colorado, and New Mexico, the off-range launch program was approved and invaluable test information was (and still is) collected. During General Thorlin's career, the Ordnance Corps began to grow rapidly. In order to attract officers to the expanding Ordnance Corps, General Thorlin proposed a scholarship program for ROTC cadets who were to be Ordnance officers. The program was finally adopted for all branches 6 years later.

## MAJOR GENERAL J. FREDERICK THORLIN

General Thorlin was born in Portland, Oregon, on 21 June 1910. After graduating at the top of his class in high school, he entered West Point, from which he graduated in 1933. His first six years of commissioned service were spent, as an Artillery Officer, in varied assignments in Virginia, Texas, California, and the Philippines (Corregidor).

In June 1939, upon graduation from the Artillery School, General Thorlin transferred to the Ordnance Corps and further schooling, this time the Ordnance School at Aberdeen Proving Ground, Maryland. After a year of this, he created and organized the Ordnance Civilian Inspector School at Watertown Arsenal, Massachusetts. This school furnished the cadre of thousands of Ordnance inspectors required for America's initial role in World War II. In January 1941, General Thorlin was transferred to the Pentagon and put in charge of the training of all military personnel in the Ordnance Corps. Following this, he was responsible for handling all Ordnance troop units: their composition, equipment, and alloction to various wartime task forces. In addition, he was charged with the preparation of all Ordnance military publications covering doctrine, materiel, and supply.

In February 1944, after a short course on Infantry Division tactics at the Command and General Staff College, General Thorlin joined the staff of Fleet Admiral Nimitz at Pearl Harbor as Chief of the Ground Ordnance Section of the joint staff. In this capacity, he integrated Army and Marine Corps Ordnance activities, including the planning, allocation, and control of all ground ammunition for combat operations in the Pacific Ocean Area. He participated in planning the Marianas, Iwo Jima, Palau, Leyto, and Okinawa campaigns and was awarded the Navy Bronze Star and the Navy Gold Medal.

After the war, General Thorlin attended the Naval War College at Newport, Rhode Island, and the Massachusetts Institute of Technology at Cambridge, Massachusetts, obtaining a Master's Degree in Mechanical Engineering.

After one and a half years at Aberdeen, where he was in charge of the technical testing of all tanks, trucks, and other automotive materiel for the Army, he was transferred again to the Pentagon. For the next three years, he supervised and directed all Ordnance automotive research and development activities.

After a year at the Industrial College of the Armed Forces, he reported to Germany in 1954 where his principle duty for two years was that of a trouble shooter at large Ordnance Automotive Rebuild Plants. In quick succession, he commanded the Karlsfeld plant at Munich, the Schwabisch-Gmuend plant, and the Boeblingen plant. Upon completion of these tasks, he was transferred to U. S. Army, Europe, headquartered in Heidelberg, where he planned and directed the repair and supply of all Ordnance material in Germany and France.

In June 1957, he arrived at Aberdeen Proving Ground for his third tour there. For two years, he was head of the Ordnance Board, a small group of Ordnance officers who worked on special and advanced studies for the Chief of Ordnance. In May 1959, General Thorlin was appointed head of the Ordnance Training Command. In June 1960, he assumed command of the Ordnance

Tank-Automotive Command in Detroit, Michigan. General Thorlin then assumed command of the White Sands Missile Range.









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